**AM 3.1:  Graph 10 Functions(linear, quadratic, cubic, abs. value, sq root, exp, log, sine, cosine, reciprocal and piecewise)**

Graph functions from handout

pg 49 1, 11, 12,16, 19, 29

**AM 3.2:  Describe Shapes of Functions**

Talk about why have that particular shape+ AN APPLICATION OF EACH…Writing questions

Discuss as we graph the 10 functions from the above learning target

**AM 3.3 Find Properties of a function:  domain, range, continuity, VA**

Pg 9 15, 51 (just find domain, range/don’t use table)

Pg 186 14-19 (VA only)

Pg 165 5, 12, 13, 16, 17 (continuous or not, name type: removeable vs nonremoveable)

**AM 3.4 Find properties of a function: extrema, inc/dec, and symmetry**

pg 177 13, 14, 19, 21 (find local extrema, absolute extrema)

Pg 166 26-30 (use our notation, not the books)

Pg 134 14-19 (even, odd, neither only)

**AM 3.5 Describe Transformations of Functions**

Worksheet copy from another book (13,14,22,33)

Other side of worksheet - absolute value shifts and reflections

Hmwk pg 142 2, 8, 10, 11, 14-17

Practice examples pg 143 20, 23

**AM 3.6 Project**

See handout

**AM4.1 Know how to explain where solution methods come from and why processes work (word questions)**

Know roots, multiplicity, number classifications, Fundamental Theorem of Algebra, completing the square origins, quadratic formula origins

**AM4.2 Solve polynomial, radical, and rational equations**

Pg 210 16, 17, 29, 39-43, 53

Pg 234 11-17 odd (find all zeros…ignore book directions)

worksheet

Pg 255 12-19, 22, 26, 27, 36

Pg 247 12-17

**AM4.3 Apply polynomial, radical, and rational equations to real-world problems**

Pg 220 36, 37

Pg 227 44

Optimization problems with boxes and cans

**AM4.4 Write rational functions and analyze properties (domain, range, VA, HA, intercepts, holes)**

worksheet

**AM11.1 Solve exponential and logarithmic equations including real-world situations**

Pg 708 8, 26b, c, 31a

Pg 714 6, 7

Pg 731 36, 37

Pg 736 36-40, 58

Banking

Exponential growth and decay

Earthquakes

**AM11.2 Be able to explain the basic exponential and logarithm values**

worksheet

pg 708 10-14, 22

pg 700 4-8, 20-31, 72

Pg 723 10-12, 32-35, 41, 47

Worksheet 49-67 odd

**AM 11.3 Apply the concepts of exponents and logs to purchasing a car**

See handout for project

**AM 10.1 Define, describe, and graph conic sections**

Define all conic functions, derive their equations, name uses of them

Pg 627 15-19, 23-25

Pg 637 7, 8, 16-26,35, 49

Pg 650 15-18, graph, 24

pg 682 13-19

Pg 688 14-18, 20, 21, 25, 26, 55, 56

**AM 10.2 Find properties of conic sections**

All homework above in 10.1

**AM2.1 Know how to do matrix operations (add, subtract, multiply, find inverse)**

Pg 83 27-36, 50

Handout

pg 83 38-46

Find the inverse (and not just the determinant) pg 102 15-33

**AM2.2 Know how to solve a system of equations using matrices**

Pg 103 35-41, 45 (Follow the method we used in class)

pg 76 9-25

Worksheet 17-21, 25-27